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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,309	04/23/2001	Fumiaki Ito	35.C15311	2780
5514	7590 05/18/2006		EXAM	NER
	CK CELLA HARPER	& SCINTO	EDOUARD, PAT	RICK NESTOR
30 ROCKEFE NEW YORK,	ELLER PLAZA NY 10112		ART UNIT	PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/839,309	ITO ET AL.
Office Action Summary	Examiner	Art Unit
	Patrick N. Edouard	2626
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l. ely filed the mailing date of this communication. O (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 03 Ma	arch 2006.	
·= · ·	action is non-final.	
3) Since this application is in condition for allowan	ice except for formal matters, pro	secution as to the merits is
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) 1 and 3-15 is/are pending in the applic	cation.	
4a) Of the above claim(s) is/are withdraw	vn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1 and 3-15</u> is/are rejected.		
7) Claim(s) is/are objected to.		,
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of the priorical statement of the prioric</li></ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)		
Paper No(s)/Mail Date	6)	

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### **DETAILED ACTION**

1. This Office Action is in response to communication filed 03/03/2006. Claims 1, and 3-15 are pending. Claim 2 is canceled.

#### **Response to Arguments**

2. Applicant's arguments with respect to claims 1, and 3-15 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 and 3-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladd et al. (6,269,336 filed 10/2/1998) in view of Chung et al (6,115,686).

The table below summarizes the limitations of these claims and teachings in Ladd et al. that meet these limitations.

Claim #	Limitations	Ladd et al.
1	A document processing apparatus comprising:	
	document obtaining means for obtaining a	The network access apparatus of the
	document written in a predetermined markup	system allows the user to access (i.e., view
	language from a designated source	and/or hear) the information retrieved from
	rule identification information extraction means	the information source. (Col. 3, lines 40-
	the obtaining means	42). The information can be stored in a
		database of the information source and

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rule selecting means for selecting a rule defining voice input/output contents from a plurality of predetermined rules

can include text content, <u>markup language</u> document or pages (Col 11, lines 42-45). The nested HTML tags

The parser unit receives the information from the network fetcher unit and parses the information according to the syntax rules of the markup language. (Column 12, lines 18-20) The markup language can include elements that describe the structure of a document or page, provide pronunciation of words and phrases, and place markers in the text to control interactive voice services. The markup language also provides elements that control phrasing, emphasis, pitch, speaking rate, and other characteristics. (Column 16, 12-18 and FIG. 6) As seen from FIG. 6, the <DIALOGUE> section contains both input candidates and output contents, which may also include instructions to fetch additional elements via SQL calls. (Col. 41, lines 45-50)

document analyzing means for analyzing a designated range of the document obtained by said document obtaining means based on the rule selected by said rule selecting means to <u>fetch</u> voice output contents, voice input candidates, and designation information for <u>designating a next processing object</u> corresponding to each <u>voice input candidate f</u>

The interpreter unit determines the <u>next</u> state or step based upon the structure of the dialog and the <u>inputs from the user</u>.

When the interpreter unit transitions to a new dialog or page, the address of the new dialog or page is then sent to the <u>network</u> fetcher. (Column 13, lines 55-59)

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voice outputting means for voice-outputting the voice output contents fetched by said document analyzing means

voice recognizing means for <u>voice-recognizing</u> the voice input by the user

controlling means for checking the result of recognition by said voice recognizing means against the input candidates fetched by said document analyzing means to control obtainment of a new document by said document obtaining means or next analysis by said document analyzing means based on designation information corresponding to the input candidate matching the recognition result.

The TTS unit of the VRU server receives textual data or information... The TTS unit processes the textual data and converts the data to voice data or information.

(Column 9, lines 3-10)

The ASR unit of the VRU server provides speaker independent <u>automatic speech</u> recognition of speech inputs or communications from the <u>user</u>. (Column 9, lines 27-30)

The interpreter unit can transition from state to state (i.e., step to step) within a tree structure (i.e., a dialog) of a markup language document or can transition to a new tree structure within the same dialog or another dialog. The interpreter unit determines the next state or step based upon the structure of the dialog and the inputs from the user. When the interpreter unit transitions to a new dialog or page, the address of the new dialog or page is then sent to the network fetcher. (Column 13, lines 52-59)

It is noted that Ladd teaches the claimed invention but does not explicitly teach a rule selecting means for selecting a rule corresponding to the extracted rule identification information ...identification information stored in a memory...in the obtained document. However, this feature is well known in the art as evidenced by Chung et al who teach in figures 1-5b, the HTML parser 24 outputs the HTS control rules to the HTS control parser 22 wherein the HTS control parser can receive four different types of rules (intonation, audio data rule, enunciation rule and terminology translation rule). Furthermore, the HTS

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control rules 110-180 embedded in the HTML comment tag wherein the rules (110-180) are designated by identifiers. (col. 6, lines 9-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate into Ladd the rule selection means as taught by Chung et al because it would provide an system that can accommodate HTML documents with nested HTML textual tags and enunciate symbols correctly depending on context.

As per claim 4, Chung et al teach rule selecting means selects a predetermined rule if said rule identification information extraction means cannot ...in the obtained document 9 his HTS parser 22, his tag mapping table 41, his parameter 42 and his audio table 43).

#### Ladd et al further teach:

3	The document processing apparatus according	markup language document includes tags
	to claim 1, wherein said <u>rule identification</u>	(Column 16, line 29-31)
	information is a predetermined attribute value of a	
	predetermined tag.	
4	The document processing apparatus according	If a pre-existing grammar is not found at
	to claim 1, wherein said rule selecting means	block, the voice browser dynamically
	selects a predetermined rule if the rule	generates the grammar for the user input.
	identification information is not described in the	The voice browser looks up the
	obtained document.	pronunciations for the user in a dictionary.
		(Column 14, lines 29-33)
5	The document processing apparatus according	When the interpreter unit transitions to a
	to claim 1, wherein said document analyzing	new dialog or page, the address of the new
	means fetches as said designation information a	dialog or page is then sent to the network
	source from which a next document is obtained.	fetcher. (Column 13, lines 55-59) The
		network fetcher unit retrieves information,
		including markup language documents,
		audio samples and grammars from the
		information sources. (Column 12, lines
		10-14)
6	The document processing apparatus according to	The network fetcher unit retrieves
	claim 1, wherein said document analyzing means	information, including markup language

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	fetches an analyzed range of a next document as	documents (Column 12, lines 10-14).
	said designation information.	Since network fetcher can retrieve full
		documents, it can inherently retrieve
		multiple documents specified in the
	!	analyzed range of a next document.
7	The document processing apparatus according	The communication node can also allow
	to claim 1, wherein said rule selecting means	the user to select a particular speech
	selects a rule based on instructions from a user.	recognition model. (Column 6, lines 25-
		36) or choose models based on
		<profile> tag information (Col. 24, lines</profile>
		12-65)
9	The document processing apparatus according	The PROMPT element of the markup
	to claim 1, wherein said <u>plurality of rules</u> includes	language is used to define content (i.e.,
	a rule which defines a predetermined attribute	text or an audio file) that is to be presented
	value of a predetermined tag as voice output	to the user. (Column 18, line 32-36).
	contents, and contents surrounded by	The INPUT element of the markup
	predetermined second tags as input candidates,	language is used to define a valid user
	in said document.	input within each STEP element. (Column
		18, line 56-58)
	The document processing apparatus according to	See example (Column 16, line 63 –
10	claim 9, wherein in said rule, if said recognition	Column 17, line 15). The page consists of
	result matches an input candidate, contents	one rule (DIALOG) encompassing
]	ranging from the contents surrounded by said	PROMPT elements that define voice output
	second predetermined tags which correspond to	contents and INPUT elements that define
	the input candidate up to a third predetermined	input candidates. The nature of the markup
	tag are defined as next voice output contents, and	language is such that these elements can
	an anchor in the voice output contents is defined	be arranged in a variety of configurations
	as a <u>next input candidate</u> .	that limit claim 11.
11	The document processing apparatus according to	See example (Column 16, line 63 –
	claim 1, wherein said plurality of rules includes a	Column 17, line 15). The page consists of
	rule which defines contents ranging from the head	one rule (DIALOG) encompassing
	of said document to a predetermined tag as voice	PROMPT elements that define voice output
	output contents, and an anchor in the voice output	contents and INPUT elements that define
	contents as an <u>input candidate</u> .	input candidates. The nature of the markup

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		language is such that these elements can
		be arranged in a variety of configurations
		that limit claim 11.
12	The document processing apparatus according to	The telecommunication network is
	claim 1, wherein said voice input and voice output	preferably connected to the communication
	are performed through a telephone line.	node via a high-speed data link, such as, a
		T1 telephone line. (Column 5, lines 39-42)
13	A document processing method comprising:	
	a document obtaining step of obtaining a	The network access apparatus of the
	document written in a predetermined markup	system allows the user to access (i.e., view
	language from a designated source from which	and/or hear) the information retrieved from
	the document is to be obtained	the information source. (Col. 3, lines 40-
		42). The information can be stored in a
		database of the information source and
		can include text content, markup language
		document or pages (Col 11, lines 42-45)
	a rule selecting step of selecting a rule defining	The parser unit receives the information
	voice input/output contents from a plurality of	from the network fetcher unit and parses
	predetermined rules	the information according to the syntax
		rules_of the markup language. (Column 12,
		lines 18-20) See definition of markup
		language at Column 16, 12-18.
	a document analyzing step of analyzing a	The interpreter unit carries out a dialog with
	designated range of the document obtained in	the user based upon the tree structure
	said document obtaining step based on the rule	representing a markup language
	selected in said rule selecting step to fetch voice	document. (Column 13, lines 45-47)
	output contents, voice input candidates, and	When the interpreter unit transitions to a
	designation information for designating a next	new dialog or page, the address of the new
	processing object corresponding to each voice	dialog or page is then sent to the network
	input candidate	fetcher. (Column 13, lines 55-59)
L		

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a voice outputting step of voice-outputting the	The TTS unit of the VRU server receives
voice output contents fetched in said document	textual data or information The TTS unit
analyzing step	processes the textual data and converts
	the data to voice data or information.
	(Column 9, lines 3-10)
	(30141111 3, 11163 3-10)
a voice recognizing step of voice-recognizing the	The ASR unit of the VRU server provides
voice input from the user	speaker independent automatic speech
	recognition of speech inputs or
•	communications from the <u>user</u> . (Column
	9, lines 27-30)
and a controlling step of checking the result of	The interpreter unit can transition from
recognition by said voice recognizing step against	state to state (i.e., step to step) within a
the input candidates fetched in said document	tree structure (i.e., a dialog) of a markup
analyzing step to control obtainment of a new	language document or can transition to a
document by said document obtaining step or	new tree structure within the same dialog
next analysis by said document analyzing step	or another dialog. The interpreter unit
based on designation information corresponding	determines the next state or step based
to the input candidate matching the recognition	upon the structure of the dialog and the
result.	inputs from the user. When the interpreter
	unit transitions to a new dialog or page, th
	address of the new dialog or page is then
	sent to the network fetcher. (Column 13,
	lines 52-59).
	<u> </u>

5. Claims 13-15 are the same in scope and content as claim 1 above and therefore are rejected under the same rationale.

The combination of Ladd with Chung does not explicitly teach assigning priorities to rules and choosing rules based on their respective priorities.

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However, the examiner takes the official notice that it is well-known in the art of speech recognition to assign priorities to speech models (which are part of the rules specified by the XML document in Ladd et al.'s invention) in speech recognition systems in order to make the selection process of required speech models more flexible to the user's requirements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Ladd et al. with Chung to assign priorities and choose rules based on assigned priorities because this would enable the system to be more flexible to the user's requirements and choose a rule that would best fit the situation.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick N. Edouard whose telephone number is 7033086725. The examiner can normally be reached on M-TH 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571 272 7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PRIMARY EXAMINER

PNE